

# State of Utah

## DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF AIR QUALITY

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DAQE-759-01

September 11, 2001

Dale Hansen  
Asphalt Materials, Incorporated  
P. O. Box 5  
West Jordan, Utah 84084

Dear Mr. Hansen:

Re: Approval Order for an Addition of a Crawler Tractor  
Salt Lake County - CDS SM, NA, NSPS, TITLE V  
Project Code: N1981-006

The attached document is an Approval Order for the above-referenced project.

Future correspondence on this Approval Order should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Mr. Enqiang He. He may be reached at (801) 536-4010.

Sincerely,

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Richard W. Sprott, Executive Secretary  
Utah Air Quality Board

RWS:EH:re

cc: Salt Lake City-County Health Department  
Mike Owens, EPA Region VIII

**STATE OF UTAH**

**Department of Environmental Quality**

**Division of Air Quality**

**APPROVAL ORDER FOR AN ADDITION OF A CRAWLER  
TRACTOR**

**Prepared By: Enqiang He, Engineer  
(801) 536-4010**

**APPROVAL NUMBER**

**DAQE-759-01**

**September 11, 2001**

**Asphalt Materials, Incorporated**

**Source Contact  
Dale Hansen  
(801) 561-4231**

**Richard W. Sprott  
Executive Secretary  
Utah Air Quality Board**

### *Abstract*

*Asphalt Materials, Inc. operates a sand quarry site in Bluffdale, Salt Lake County, which is a nonattainment area for PM<sub>10</sub> and SO<sub>2</sub>, and a maintenance area for ozone. The source is included in the PM<sub>10</sub> SIP, Section IX, Part H.2.b.C. Asphalt Materials has requested to make an administrative change to add a crawler tractor. The crawler tractor shares the workload with two existing loaders. There are no production increases. New Source Performance Standards (NSPS) and Title V of the 1990 Clean Air Act apply to this source. The emissions, in tons per year, will remain the same as follows: PM<sub>10</sub> 14.17, NO<sub>x</sub> 10.93, SO<sub>2</sub> 1.00, CO 3.15, and VOC 1.35.*

The project has been evaluated and found to be consistent with the requirements of the Utah Administrative Code Rule 307 (UAC R307). A public comment period and an Air Quality Board's approval are not required for this administrative change. This air quality Approval Order (AO) authorizes the project with the following conditions, and failure to comply with any of the conditions may constitute a violation of this order:

#### **General Conditions:**

1. This Approval Order (AO) applies to the following company:

##### Facility Location

Asphalt Materials, Inc.  
Bluffdale Sand Quarry  
14700 South 1075 West  
Bluffdale, Utah

##### Corporate Location

Asphalt Materials, Inc.  
7961 South 1300 West  
West Jordan, Utah 84084  
PHONE: (801) 561-4231  
FAX: (801) 561-7795

The equipment listed below in this AO shall be operated at the following location:

##### PLANT LOCATION:

14700 South 1075 West, Bluffdale, Salt Lake County, Utah

Universal Transverse Mercator (UTM) Coordinate System: UTM Datum NAD27  
4,477.8 kilometers Northing; 422.144 kilometers Easting; Zone 12

##### Direction:

Take the Bluffdale exit off of I-15 and go south on the west side frontage road. Turn west on Salt Lake Valley Sand and Gravel's access road. The Bluffdale Sand Quarry is south of Salt Lake Sand and Gravel's building.

2. Definitions of terms, abbreviations, and references used in this AO conform to those used in the Utah Air Conservation Rules 307 (UAC R307), Utah Administrative Codes R307 (UAC R307), and Series 40 of the Code of Federal Regulations (40 CFR). These definitions take precedence unless specifically defined otherwise herein.
3. Asphalt Materials, Inc. shall install the Recycle Plant and operate the sand quarry according to the terms and conditions of this AO as requested in the Notice of Intent dated May 26, 2000, and additional information submitted on August 9, 2001.

4. Regardless of any inconsistency between conditions of this AO and Section IX, Part H, subparts 2.a and 2.b.C, of the SIP for Asphalt Materials Inc., this AO shall take precedence as provided by R307-305-2.
5. This AO shall replace the AO (DAQE-196-01) dated May 29, 2001.
6. The approved installations shall consist of the following equipment or equivalent\*:

Crushing Plant

- A. Triple deck screen - 6 feet x 16 feet, manufactured in 1981
- B. Triple deck screen - 5 feet x 16 feet, manufactured in 1986
- C. Two (2) loaders and one (1) crawler tractor\*\*
- D. Associated conveyors (all conveyors are subject to NSPS Subpart OOO)  
Size: 75'x30";  
Size: 75'x30";  
Size: 75'x30";  
Size: 75'x30";  
Size: 75'x30";  
Size: 50'x26", and  
Feeder with belt: home made; manufactured in 1995
- E. Crusher (one) - 250 tons per hour, manufactured in 1986
- F. Crusher (one) - 200 tons per hour, manufactured in 1997
- G. Screen - 6 feet x 20 feet, manufactured in 1998

Recycle Plant

- H. One (1) triple deck screen, capacity - 400 tons per hour
- I. One (1) impact crusher, capacity - 250 tons per hour
- J. One (1) jaw crusher, capacity - 400 tons per hour
- K. One (1) 275-300 HP diesel generator
- L. Conveyors
- M. Radial stacker
- N. One (1) front-end loader

\* Equivalency shall be determined by the Executive Secretary

\*\*New equipment

**Limitations and Tests Procedures**

7. Visible emissions from the following emission points shall not exceed the following values:

- A. All crushers - 15% opacity
- B. All screens - 10% opacity
- C. All conveyor transfer points - 10% opacity
- D. All diesel engines - 20% opacity
- E. Drop points - 10% opacity
- F. All other points - 20% opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.

8. The following production limits shall not be exceeded.

**Crushing Plant**

- A. 1,120,000 tons of processed aggregate per rolling 12-month period
- B. 350 tons per hour of processed aggregate
- C. 16 hours per day
- D. 3,200 hours per rolling 12-month period

**Recycle Plant**

- E. 200,000 tons of road base per rolling 12-month period
- F. 250 tons per hour of road base

Compliance with the 12-month limitations shall be determined on a rolling 12-month total. The owner/operator shall calculate a new 12-month total based on the first day of each month using data from the previous 12 months. Records of production shall be kept for all periods when the plant is in operation. Production shall be determined by operational log, belt scale records, or vendor receipts. The records shall be kept on a daily basis. Hours of operation shall be determined by supervisor monitoring and maintaining of an operations log.

**Roads and Fugitive Dust**

9. All unpaved roads and other unpaved operational areas that are used by mobile equipment shall be water sprayed and/or chemically treated to control fugitive dust. Treatment shall be of sufficient frequency and quantity to maintain the surface material in a damp/moist condition. The opacity shall not exceed 20% during all times the areas are in use or unless it is below freezing. If chemical treatment is to be used, the plan must be approved by the Executive Secretary. Records of water treatment shall be kept for all periods when the plant is in operation. The records shall include the following items:

- A. Date

- B. Number of treatments made, dilution ratio, and quantity
- C. Rainfall received, if any
- D. Time of day treatments were made

10. The haul road limitations shall be:

- A. 1.5 miles in length round trip
- B. 10 miles per hour

The vehicle speed on the haul road shall be posted, at a minimum, on site at the beginning of the haul road so that it is clearly visible from the haul road.

11. Control of disturbed or stripped areas is required at all times (24-hours per day every day) for the duration of the project/operation until the area is reclaimed.

12. Visible fugitive dust emissions from haul-road traffic and mobile equipment in operational areas shall not exceed 20% opacity. Visible emissions determinations for traffic sources shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Six points, distributed along the length of the haul road or in the operational area, shall be chosen by the Executive Secretary or a designated representative. An opacity reading shall be made at each point when a vehicle passes the selected points. Opacity readings shall be made one-half the vehicle length or greater behind the vehicle and at approximately one-half the height of the vehicle or greater. The accumulated six readings shall be averaged for the compliance value.

13. Water sprays or chemical dust suppression sprays shall be installed at the following points to control fugitive emissions:

- A. All crushers
- B. Screens listed in Condition #6B, G&H
- C. All conveyor transfer points

The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary.

14. The storage piles shall be watered to minimize generation of fugitive dusts as dry conditions warrant or as determined necessary by the Executive Secretary.

15. Asphalt Materials shall abide by the fugitive dust control plan submitted. The limitations and conditions in the plan shall not be changed.

**Fuels**

16. The owner/operator shall use only #1 or #2 fuel oil as a fuel.

17. The sulfur content of #1 or #2 fuel oil burned shall not exceed 0.5 percent by weight for off-highway mobile equipment and 0.05% sulfur by weight for on-highway mobile equipment. Sulfur content shall be decided by ASTM Method D-4294-89, or approved equivalent. The sulfur content shall be tested if directed by the Executive Secretary.

### **Federal Limitations and Requirements**

18. In addition to the requirements of this AO, all provisions of 40 CFR 60, New Source Performance Standards (NSPS)<sup>1</sup> Subparts A and OOO, 40 CFR 60.1 to 60.18 and 40 CFR 60.670 to 60.676 (Standards of Performance for Nonmetallic Mineral Processes) apply to this installation. Affected facilities include equipment listed in Condition Number 6.B, D, E, F, G, H, I, J and L.

### **Records & Miscellaneous**

19. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded, and the records shall be maintained for a period of two years.
20. The owner/operator shall comply with UAC, R307-150 Series. Inventories, Testing and Monitoring.
21. The owner/operator shall comply with R307-107, UAC. General Requirements, Unavoidable Breakdown.

All records referenced in this AO or in applicable NSPS, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. All records shall be kept for a period of two years. Emission inventories shall be kept for a period of five years from the due date of each emission statement or until the next inventory is due, whichever is longer. A summary of those records that are required as part of this AO is included herein. This summary shall not be considered an additional requirement, but is included for informational purposes only. The condition that requires that these records be kept as part of the compliance with this AO is listed following the individual record. Examples of records to be kept at this source shall include the following as applicable:

- |    |                           |                      |
|----|---------------------------|----------------------|
| A. | Production rate           | (Condition number 8) |
| B. | Hours of operation        | (Condition number 8) |
| C. | Fugitive emission control | (Condition number 9) |

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<sup>1</sup> NSPS = New Source Performance Standards.

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|----|---------------------------|-----------------------|
| D. | Maintenance records       | (Condition number 19) |
| E. | Emission inventory        | (Condition number 20) |
| F. | Upset, breakdown episodes | (Condition number 21) |

Any future modifications to the equipment approved by this order must also be approved in accordance with R307-401, UAC.

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including UAC R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site: [http://www.eq.state.ut.us/eqair/aq\\_home.htm](http://www.eq.state.ut.us/eqair/aq_home.htm)

Annual emissions for this site (Bluffdale sand quarry) are currently calculated at the following values:

	<u>Pollutant</u>	<u>Tons/yr</u>
A.	PM <sub>10</sub> .....	14.17
B.	SO <sub>2</sub> .....	1.00
C.	NO <sub>x</sub> .....	10.93
D.	CO .....	3.15
E.	VOC .....	1.35
F.	Aldehydes .....	0.12

These calculations are for the purposes of determining the applicability of Prevention of Significant Deterioration, nonattainment area, and Title V source requirements of the UAC R307. They are not to be used for purposes of determining compliance.

Approved By:

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Richard W. Sprott, Executive Secretary  
Utah Air Quality Board